

May 23, 2017

Ex Parte

Ms. Marlene H. Dortch
Secretary
Federal Communications Commission
445 12th Street, SW
Washington, DC 20554

Re: *Connect America Fund – Alaska Plan*, WC Docket No. 16-271

Dear Ms. Dortch:

At the request of the Wireless Telecommunications Bureau, General Communication, Inc. (“GCI”) hereby submits shapefiles showing the estimated location of population in remote Alaska census blocks that are believed to be ineligible for Alaska Plan support. As established in the *Alaska Plan Order*, census blocks are ineligible if they have 4G LTE service from providers that are either unsubsidized or not eligible for the remote Alaska delayed phase down to 85% or more of the population of the block as of December 31, 2014.¹ GCI’s population estimates, together with other information, were used to suggest which blocks GCI believed to be eligible for Alaska Plan mobile support, ineligible for support, or eligible for the future reverse auction.

GCI created the attached shapefiles using exactly the same process used to create the shapefiles submitted with GCI’s proposed mobile commitments in November 2016.² A copy of the transmittal letter explaining that process is attached.

GCI emphasizes that its population estimates are just that – estimates. While they represent GCI’s good faith effort to estimate the location of population across more than 9,000 remote Alaska census blocks, they are based on a model and in some instances may not reflect the actual location of population.

¹ See *Connect America Fund, Universal Service Reform – Mobility Fund, Connect America Fund – Alaska Plan*, Report and Order and Further Notice of Proposed Rulemaking, FCC 16-115, 31 FCC Rcd. 10,139, 10,167 ¶ 87 (2016) (“*Alaska Plan Order*”); 47 C.F.R. § 54.317(e).

² See Letter from Julie A. Veach, Counsel to General Communication, Inc., to Marlene H. Dortch, Secretary, FCC, WC Docket No. 16-271 (filed Nov. 29, 2016) (attaching list of remote Alaska census blocks and shapefiles reflecting the estimated location of population but not within ineligible blocks).

Ms. Marlene H. Dortch
May 23, 2017
Page 2 of 2

Please do not hesitate to contact me if you have any questions regarding this matter.

Sincerely,



Julie A. Veach
Counsel to General Communication, Inc.

Attachs.

cc: Paroma Sanyal
Peter Trachtenberg
Matthew Warner (shapefiles via USB)
Matthew Collins (shapefiles via USB)

November 29, 2016

Ex Parte

Ms. Marlene H. Dortch
Secretary
Federal Communications Commission
445 12th Street, SW
Washington, DC 20554

Re: *Connect America Fund – Alaska Plan*, WC Docket No. 16-271

Dear Ms. Dortch:

On May 9, 2016, the Alaska Telephone Association submitted proposed mobile performance commitments for General Communication, Inc. (“GCI”) (and other Alaska Plan signatories).¹ Consistent with the *Alaska Plan Order*,² GCI hereby submits an updated version of its proposed performance commitments. Specifically, GCI has updated its commitments to reflect a baseline population as of December 31, 2015, its most recent analysis of its ability to deploy and upgrade mobile service, and refinements to its allocation of population among the various technology and middle mile categories.

In addition, at the request of Wireless Telecommunications Bureau staff, GCI also submits shapefiles showing the estimated location of population within remote Alaska census blocks and a list of remote Alaska census blocks identified as eligible for Alaska Plan mobile support, ineligible for support,³ or eligible for the future reverse auction.⁴ GCI created the

¹ Letter from Christine O’Connor, Executive Director, Alaska Telephone Association, to Marlene Dortch, Secretary, FCC, WC Docket No. 10-90, Attach. at 18 (filed May 9, 2016).

² *Connect America Fund, Universal Service Reform – Mobility Fund, Connect America Fund – Alaska Plan*, FCC 16-115, Report and Order and Further Notice of Proposed Rulemaking, 31 FCC Rcd. 10,139, 10,171 ¶ 97 (2016) (“*Alaska Plan Order*”) (inviting mobile carriers that had proposed performance commitments on file at the time of adoption of the *Alaska Plan Order* to update them no later than 30 days after the effective date of the order, or December 6, 2016).

³ As established in the *Alaska Plan Order*, these census blocks have 4G LTE service from providers that are unsubsidized or not eligible for the delayed phase down under rule 54.307(e)(3) in Alaska to 85% or more of the population of the block as of December 31, 2014. *See id.* at 10,167 ¶ 87; 47 C.F.R. § 54.317(e).

⁴ These are census blocks in remote Alaska in which less than 15% of the population is within any mobile carrier’s coverage area as of December 31, 2014. *Alaska Plan Order*, 31 FCC Rcd. at 10,173-74 ¶ 106.

shapefiles and the list of census blocks through an analysis of publicly available information and a few reasonable assumptions.

First, GCI obtained the census block boundaries for remote Alaska from the Census Bureau.⁵ Onto that, GCI layered the Census Bureau's population count for each census block.⁶ GCI labeled blocks with no reported population as uninhabited and did not analyze them further.

Next, GCI turned to road data. Because large areas of Alaska are uninhabited and because many Bush villages are unconnected to each other by highways or other roads, road locations are a key predictor of the location of population. GCI therefore overlaid TIGER road data onto the remaining census blocks. GCI included all roads in its analysis except for certain minor routes thought less likely to predict the location of a residence: unnamed roads, roads marked as "trails" and passable only by 4WD vehicles, and pedestrian trails.⁷ GCI drew polygons around the roads extending 100 meters from each side of each road. Areas outside of the polygons were assumed to be uninhabited.

GCI then overlaid General Land Status data available from the State of Alaska.⁸ The State categorizes land by its ownership. For example, land that is set aside as state or national parkland is identified as such, and similarly for land that is owned by private individuals or Native populations. GCI eliminated any areas of its polygons that were not characterized as privately, Natively, or municipally owned to reflect that the population is most likely to live in these areas rather than other areas, such as national wildlife refuges or state parks.

At this point, if any census block had population but had been completely eliminated through the road or General Land Status analyses, the entire census block was restored rather than eliminated. GCI then evenly distributed the population of each census block within the portion of each census block remaining.

Identifying the census blocks eligible for Alaska Plan support and unserved blocks for the remote auction then became a matter of comparing the distributed population with the service areas of mobile providers. First, GCI overlaid the Form 477 shapefiles showing 4G LTE service as of December 31, 2014, for each mobile carrier that is unsubsidized or ineligible for the delayed phase down and that offers that technology in remote Alaska. Any census block in which 85 percent or more of the distributed population was within the 4G LTE service area was

⁵ U.S. Census Bureau, Geography, 2010 Census – Census Block Maps, <http://www.census.gov/geo/maps-data/maps/block/2010/>.

⁶ U.S. Census Bureau, Geography, TIGER/Line® with Selected Demographic and Economic Data, <http://www.census.gov/geo/maps-data/data/tiger-data.html> (2010 Census Population and Housing Unit Counts – Blocks).

⁷ U.S. Census Bureau, Geography, TIGER/Line® Shapefiles and TIGER/Line® Files, <http://www.census.gov/geo/maps-data/data/tiger-line.html>.

⁸ Alaska Dep't of Natural Resources, Spatial Datasources, General Land Status, <http://www.asgdc.state.ak.us/>.

marked as ineligible for Alaska Plan mobile support. Second, GCI overlaid all Form 477 shapefiles (for all technologies) of all mobile providers offering mobile service in remote Alaska. Any census block where less than 15 percent of the distributed population fell within any coverage area was identified as eligible for the reverse auction for support to serve unserved areas.

GCI provides this information to the Bureau to demonstrate how it identified the census blocks eligible for Alaska Plan support and to assist the Bureau in its ongoing assessment of the state of mobile deployment in remote Alaska. GCI does not consider the locations on the shapefiles to limit where it or any other Alaska Plan participant may deploy or upgrade locations in fulfillment of its individual performance commitments. Consistent with the *Alaska Plan Order*, Alaska Plan support must be used to serve population within eligible census blocks, but the *Order* does not otherwise limit its use to certain locations within those blocks.⁹

Please do not hesitate to contact me if you have any questions regarding this matter.

Sincerely,



Julie A. Veach
Counsel to General Communication, Inc.

Attachs.

cc: Jim Schlichting
Paroma Sanyal (shapefiles via USB)
Joel Taubenblatt
Peter Trachtenberg
Gary Michaels (shapefiles via USB)
Matt Warner (shapefiles via USB)

⁹ See 47 C.F.R. § 54.317(e) (“Frozen support allocated through the Alaska Plan may only be used to provide mobile voice and mobile broadband service in those census blocks in remote areas of Alaska, as defined in §54.307(e)(3)(i), that did not, as of December 31, 2014, receive 4G LTE service directly from providers that were either unsubsidized or ineligible to claim the delayed phase down under §54.307(e)(3) and covering, in the aggregate, at least 85 percent of the population of the block.”). In addition, “providers are entitled to use support to construct the facilities required for them to meet their deployment obligations, including using support for improved backhaul and middle mile.” Upgrades or deployment of middle mile that is even outside a participant’s service area are acceptable so long as the upgrades or deployment are “necessary for service in that carrier’s service area.” *Alaska Plan Order*, 31 FCC Rcd at 10,163 ¶ 74, 10,165 ¶ 81 & n.166.